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ABSTRACT

Many caregivers doubt their ability to provide appropriate play experiences for children with special needs included in their program because some children with disabilities may not have the ability to interact and manipulate toys in a meaningful way. This paper provides guidance in appropriately adapting toys and the play situation to allow many children with disabilities to engage in meaningful interactions with toys and other play experiences. The paper offers five suggestions for selecting toys for children with special needs to allow positive learning outcomes, including the use of responsive toys and the inclusion of naturally occurring objects as toys. Suggestions for adapting toys relate to toy stabilization, toy extensions, toy attachment, and toy confinement. Suggestions are also offered for the following classroom learning centers: gross motor, fine motor, blocks, art, and dramatic play. The paper concludes by reiterating that selecting age-appropriate toys, adapting toys to children's needs, and designing centers that enhance development, caregivers can build an environment that promotes learning for all children. (KB)

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Adapting and Modifying Toys for Children with Special Needs

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Adapting and Modifying Toys for Children with Special Needs

The importance of play in promoting development has been acknowledged as early as Plato and Aristotle (Cook, Tessier, & Klein, 2004; Cherry, 1976). Quality childcare providers have recognized this need and have dedicated a large portion of the daily activities to play. However, some children with disabilities may not have the ability to interact and manipulate toys in a meaningful way. This leaves many caregivers questioning their ability to provide appropriate play experiences for children with special needs included in their program. However, by appropriately adapting toys and the play situation, many children with disabilities will be able to engage in meaningful interactions with toys and other play experiences.

Selecting Toys

By following five simple suggestions for selecting toys for children with special needs, caregivers can create play experiences in which all children will be given the opportunity to engage in positive learning outcomes:

1. Toys and play materials should be responsive (i.e., toys that produce sound, movement, or light when activated by the child).
2. Toys and play materials should be age-appropriate. In general, toys and materials that are appropriate for typically developing infants, toddlers, and preschoolers are appropriate for young children with disabilities.
3. When necessary, toys and materials should be adapted to increase engagement and learning.
4. Play materials should include naturally occurring object such as boxes, kitchen utensils, and packing materials.
5. Toys and play materials should be selected to promote learning of important skills. (Bailey and Wolery 1992)

Adapting Toys

Although the selection of appropriate toys holds a significant role in developing positive play experiences for young children, it may be necessary to adapt toys and materials to increase learning and social interactions for children with disabilities. Most adaptations revolve around issues regarding toy stabilization, toy extensions, toy attachment, and toy confinement.

Making these adaptations should not be cumbersome or expensive for caregivers. Several inexpensive materials can be used to address these modifications. For example, a hula hoop or a planter base can serve as a boundary and **confine** toys from moving out of the reach of a child with a limited range of motion. In addition, a child with limited vision would benefit from the confinement of the toy, as this will assist him or her in controlling their immediate play area. Those children in need of toys that will "stay in place" would find it advantageous if a magnetic strip was applied to the toy and a cookie sheet was accessible as a base or table for **stabilization**. Suction cups, clamps, and Velcro also provide needed stability. A piece of shelf lining with a non-slip backing can serve as a placemat to hold toys in place as the child manipulates them. Mounting wooden spools or knobs to puzzle pieces can act as an **extension** for those children with fine motor delays. This simple adaptation will allow children to grasp the puzzle piece with less effort. Velcro strips can be placed around a child's wrist to help attach a toy in place. For example, a small musical instrument such as bells could easily be **attached** to a Velcro wristband allowing the child to participate in a "musical band" activity. The handles of drum sticks and other mallets can be built up with the spongy part of a foam hair roller.

Let's Play, a project at University of Buffalo, provides simple materials used for adapting toys for young children with disabilities. Some of these materials are as follows:

Stabilization	Carpet squares, suction cups, grip liners, and/or Velcro
Extending/Building Up	Modeling clay, popsicle sticks, sponge rollers, foam padding, and/or commercial Plasticine
Attaching	Links (can be purchased from Discovery Toys, or Right Start), snaps on fabric tape, elastic straps, and/or magic shoelaces
Confining	Hula- hoop, box tops, and/or planter bases

Before making adaptations to toys, caregivers should take into account that all toys selected for children should include those that emphasize the skills that children are capable of performing without assistance (Exceptional Parent, 1993) and are interested in. This holds especially true for children with disabilities.

It is also valuable to recognize that several commercially produced, and inexpensive toys hold noteworthy value for children with special needs. These toys may not need adaptations and may already be items that the childcare facility has purchased. For example, Sassy, Inc. produces a Ring Wing Rattle for approximately $7.99. This toy encourages reaching and grasping as well as stimulates vision. Childcare providers can assist in creating an environment filled with toys and materials that are more engaging for children with disabilities. However, any toy, adapted or not, is not a substitute for interactions and nurturing caregivers.

Adapting Learning Centers

Young children typically learn through activities within learning centers in their classrooms. Through activities in the gross motor center or area, children with disabilities can improve their physical development. In general, large, sturdy toys are easier for children with disabilities to use than smaller toys with delicate parts. In the gross motor center, large balls with less bounce will be easier for the child to use than smaller ones. Alternative materials include beanbags and large textured balls. After the child is able to roll and catch larger balls, then she can be provided with smaller ones. Ball and mitt sets that have Velcro are easier for the child to use as he adapts to smaller sizes of balls. Targets can be enlarged and moved closer to the child with special needs. Toys that promote the gross motor development of children with disabilities include wagons, scooter boards, ball pits, tunnels, and rocking horses. Tricycles can be adapted by building up the pedals with blocks and using pieces of inner tubes as straps for the pedals. Swings that have seats with backs provide needed support for children with physical disabilities.

In the fine motor center, it is important to use the suggested ways to stabilize and confine materials that were mentioned earlier (cookie sheet, magnetic strips, Velcro, shelf lining with non-slip backing). When children string beads, the stiff end of the string can be enlarged with masking tape, or pipe cleaners can be used rather than string. For inset puzzles, the inset board can be painted with neon colors for each piece. Play dough and clay can be placed in a Zip Lock bag for children who are squeamish about touching these materials. Rather than stacking one-inch cubes, children with fine motor difficulties

can stack empty tuna cans instead. Hand strengthening materials such as clothespins are particularly helpful for children with motor weakness. Sand and water tables should be accessible to children in wheelchairs. If the child needs more stability, a tub with sand or water and accompanying toys can be placed on the floor for the child's play.

When working with blocks, children with motor disabilities can be encouraged to build structures horizontally, or they can build their structures against the wall. A preset number of blocks can be offered to the child in a container if it is difficult for the child to take the blocks off the shelf. It often is easier for the child to access the blocks if they are placed on a lower shelf. Bristle blocks, Legos, and large cardboard blocks all are good selections for children with disabilities in the block center.

In the art center, children with special needs may need to have the handles of paintbrushes, markers, and crayon built up with the spongy part of a foam hair roller. Paints can be enhanced by adding a fragrance or texture such as sand. High contrast colors are more stimulating for children with cognitive or vision problems. Small scissors or loop scissors can be useful for those with muscle weakness. Forms for coloring or cutting can be outlined with glue, providing a tactile boundary for the child.

The dramatic play area provides an excellent opportunity to enhance children's social and language development. Dress-up clothing, props, and a mirror help children to use their imaginations and interact with each other. For children with disabilities, closures with large buttons or Velcro are helpful. For those children with limited attention spans, the dramatic play center can be sectioned off with sheeting hung from the ceiling to reduce distractions.

Adaptations and materials for centers are summarized below:

Center	Adaptation	Helpful Toys
Gross Motor	Ball & mitt with Velcro Pedals with blocks and straps Enlarged targets Swings with seatbacks	Large balls, textured balls, bean bags, wagon, scooter board, ball pit, tunnel, rocking horse
Fine Motor	Stabilization materials Confinement materials Pipe cleaners for stringing beads Zip lock bag for play dough	Clothes pins Sand table and toys Water table and toys Puzzles
Blocks	Build structures horizontally Build against a wall Stabilization materials	Bristle blocks, Legos, large cardboard blocks, human figures, cars, trucks
Art	Built up handles for paint brushes, markers, crayons Add fragrance or texture to paint Tape paper vertically on easel Outline figures with glue	High contrast colors, small scissors, [illegible] scissors, tear art, finger paints, straws, sandpaper, easel, glue sticks
Dramatic Play	Velcro closures and large buttons on clothing Section off dramatic play area	Dress-up clothes, props, mirror, telephone, shoes, purse, play money, plastic food

It need not be difficult for caregivers to provide quality play experiences for children with disabilities in the typical childcare setting. By selecting age-appropriate toys, adapting toys to children's needs, and designing centers that enhance development, caregivers are able to build an environment that promotes learning for all children. This should be a "win-win" situation for the teacher, the center, and the children.

References

Bailey, D., & Wolery, M. (1992). *Teaching infants and preschoolers with disabilities.* New York: Merrill Publishing.

Cherry, C. (1976). *Creative play for the developing child.* Belmont, CA: Fearon Press.

Cook, R.E., Klein, M.D., & Tessier, A. (2004). *Adapting early childhood curricula for children in inclusive settings.* Upper Saddle River, NJ: Pearson Education, Inc.

Gould, P. & Sullivan, J. *The inclusive early childhood classroom: Easy ways to adapt learning centers for all children.* Beltsville, MD: Gryphon House.

Choosing holiday toys. (1993). *Exceptional Parent,* 23 *(8)*, 18-22.

Toy Positioning Aids (n.d.). Retrieved April 9, 2003, from University at Buffalo Center for Assistive Technology website: http://cosmos.ot.buffalo.edu/letsplay/index.html

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